

LEGISLATIVE COMMISSION ON GLOBAL CLIMATE CHANGE  
COMMISSION MEETING

Minutes  
Monday, March 15, 2010  
Room 643 LOB  
10:00 a.m.

The meeting was called to order at 10:10 by Representative Harrison, co-chair. She thanked everyone for coming and introduced the Sergeants-at-Arms: Martha Gadison, David Shearon, Rod Finer, Chester White and Charles Harper (**Appendix A**). The members present: Rep. Harrison, Mr. Garrou, Sen. Albertson, Sen. Jacumin, Sen. Stein, Rep. Underhill, Rep. Wilkins, Dr. Andrews, Dr. Boyles, Ms. Choi, Mr. Crawford, Dr. Erickson, Dr. Everett, Dr. Phaneuf, Mr. Slocum, Jr., Mr. Toben, Mr. Urlaub, and Mr. Wooten (**Appendix B**). The visitor registration sheets are attached as (**Appendix C**)

Representative Harrison mentioned the recent adaptation conference hosted by the Department of Environment and Natural Resources and that Bill Friday made opening comments at the conference. Dr. Friday indicated that he had been a part of several prior efforts to address climate change and growth in the State, and that the state had a moral imperative to take action.

Tim Dodge, Commission Counsel, noted changes in membership. Dean Chameides of the Nicholas School at Duke University has changed his designee on the Commission from Tim Profeta, who has served on the Commission since its inception in 2006, to Todd Wooten, Director of the Southeast Climate Resources Center at Duke.

Walter Clark, who was appointed by the President Pro Tempore of the Senate, tendered his resignation. At this point, we do not have any additional information on a new appointment being made.

An updated copy of the current membership was distributed to the Commission members. (**Appendix D**).

Biomass Report: A copy of the draft report from the Renewable Energy Committee of the Environmental Management Commission (**Appendix E**) was provided to each member describing some of the issues and recommendations the EMC has identified related to the definition of biomass as a renewable energy fuel. The report is directly related to some of the recommendations received by the Commission regarding the sustainable utilization of biomass. The EMC approved the report with a few small modifications. Mr. Dodge stated that the Commission wasn't scheduled to hear an oral report on this issue, but the report would be a useful part of the Commission's record.

Agenda: Mr. Dodge summarized the agenda. The first two items are both related to recent conferences and workshops held by the Department of Environment and Natural Resources related to Climate Change.

The first presentation from Tancred Miller (**Appendix G and H**) covers the findings of the Coastal Resource Commission's Science Panel on Sea Level Rise. The sea level rise estimates that Tancred will present provide a relevant source of information related to the potential sea level rise North Carolina's coast may face.

Tancred will also provide a brief presentation on a public attitudes and awareness study conducted by the CRC related to the potential for sea level rise and its impacts on the North Carolina Coast.

The second item on the agenda consists of a presentation by David Knight, Assistant Secretary for Natural Resources at DENR, regarding the interagency leadership team's workshop on climate change adaptation held in early March. This presentation is directly related to many of the recommendations this Commission received regarding adaptation to climate change in North Carolina, so it was thought to be appropriate to hear today.

The third item today will consist of a review of the framework for the final report of this Commission, as well as the beginning of the discussion on the findings and recommendations of the Commission.

Mr. Dodge stated that he will provide an overview of the draft final report and the thought process used in preparing the draft framework. Any time remaining today will be devoted to an informal discussion of the report and the recommendations, as well as the development of a plan to move forward at our remaining meetings. *Based on conversations with the co-chairs, they do not have any plans to take votes on the report or any of the recommendations today.* The Governmental Operations Committees will meet at 1:00 p.m. today, so the Commission will likely need to adjourn no later than 12:30 today.

Tim Toben made motion for approval of January 13, 2010 minutes, Dr. Andrews seconded, the Commission concurs and minutes are approved (**Appendix I**).

### **AGENDA Item #1**

Tancred Miller policy specialist with Division of Coastal Management. Mr. Miller gave a summary of the N.C. Coastal Resources Commission Science Panel's Sea-Level Rise Assessment Report. He states that the intent of this report is to provide state planners and policy makers with a scientific assessment of the amount of sea level rise likely to occur in this century. He states the report does not attempt to predict a specific future rate or amount of rise over the next 25 to 50 years.

Mr. Miller states that the IPCC's Fourth Assessment Report contains forecasts for global average sea level rise ranging from 0.18 meters to 0.59 meters (7 to 12 inches) by the

year 2100 AD. He states that the Science Panel recommends a minimum of 0.38 m (15 in.) will occur if there is no further acceleration. The maximum of 1.4 m (55 in.) could occur based on expectation of accelerated rise; and anticipated rise of 1 m (39 in.) should be adopted as a planning target.

The findings he presented of the Division of Coastal Management's Sea Level Rise Scoping Survey in summary of responses were: in North Carolina 620 of 1076 own NC coastal property; 53 in 100 non-NC own NC coastal property; 77 out of 100 NC counties; 18 out of 20 CAMA; 26 out of 50 U.S. states have an interest; and the total 673 out of 1176 own coastal property in North Carolina. Hertford and Hyde Counties were the only CAMA counties that did not respond.

75 percent of all respondents believe that sea level rise is occurring, 12 percent do not believe, nine percent don't know; 38 percent believe they will be affected. He states that 66 percent of the respondents believe the state should be taking steps now to plan and prepare for sea level rise. Of the CAMA counties only 59 percent responded yes that the State should be taking steps now to plan and prepare for sea level rise.

The Coastal Resources Commission was the number one agency who should be taking the lead in charge of the planning, followed by the science community and then other state agencies and federal government according to the survey.

Producing maps of the areas that are most at risk was the top recommendation for the Coastal Resources Commission and Division of Coastal Management to take to address sea level rise. It was also noted that public education should be a high priority for the CRC as well as providing technical assistance to local governments. Doing nothing was ranked very low and the use of sand bags was also very low.

According to the survey, the state of North Carolina should require coastal hazard disclosure statements for real estate transactions especially on the coast lines as the top priority to address sea level rise and also to prohibit public expenditures in at risk areas. The respondents believe CRC should decide how much sea level rise is expected and then map those up and the CRC are in the process of doing those things.

All of the full reports are on the website: [www.nccoastalmanagement.net](http://www.nccoastalmanagement.net).

Dr. Everett and Dr. Eggers asked questions related to the survey methodology. Mr. Miller stated that the survey was conducted electronically using survey monkey. It was derived from a DCM mailing list.

## **AGENDA Item #2**

The second presenter, Mr. David Knight, Assistant Secretary for Natural Resources at DENR, summarized the workshop held last month by the Interagency Leadership Team (ILT) and also gave the next steps to come out of it. The ILT is a collaboration of different agencies both federal and state that have come together to look at issues

surrounding North Carolina's transportation system. They look at planning, development and implementation surrounding transportation in North Carolina. The federal agencies include EPA, The U.S. Army Corps of Engineers, the National Oceanic and Atmospheric Administration (NOAA), and the Federal Highway Administration. State agencies include DOT, DENR, as well as Commerce, Cultural Resources and the Department of Agriculture and Consumer Services which makes a diverse group of agencies to look at transportation issues in North Carolina.

The workshop was put on to partner with local governments and other stake holders to deal with transportation related issues and develop strategies for adaptation to climate change with focus on local and regional decision makers and planners in North Carolina.

The workshop was a great success with approximately 440 participants from many different areas of interest all across the state: tourism, insurance, health, infrastructure, emergency management, as well as transportation and land use.

Mr. Knight discussed the findings contained in the U.S. Global Change Research Program, which consists of the Department of Commerce, Department of Agriculture, Department of Defense and DOT along with others on the federal level. The Program issued a report in June 2009 that included the following ten key findings: 1) global warming is unequivocal and primarily human induced; 2) climate changes are underway in the United States and are projected to grow; 3) wide spread climate related impacts are occurring now and are expected to increase; 4) climate change will stress water resources; 5) crop and livestock production will be increasingly challenged; 6) coastal areas are at increasing risk for sea level rise and storm surge; 7) risk to human health will increase; 8) climate change will interact with many social and environmental stresses; 9) thresholds will be crossed leading to large changes in climate and ecosystems; and 10) future climate change and its impacts depend on choices made today.

The workshop also focused on the three key impacts of climate change: temperature, precipitation, and sea level rise, and how they affect these different sectors. Some of the effects are damage to water and wastewater infrastructure, overflowing sewer systems, changes in energy use, human health, air quality, water borne diseases, irrigation demands for agriculture, forest fires, changes in water supply and water quality. In addition, damages to beach and coastal wetlands due to issues such as the extremes in weather and also sea level rise, economic disruptions due to catastrophes and other related events, puts pressure on vulnerable populations as well as causes population shifts.

Other workshop highlights were communicating about climate science in a changing media environment; bridging the hazards management-climate change adaptation divide; and Maryland's example of how they developed their climate change policy and practices.

The next steps is for DENR to continue its climate change initiative; begin dialogue about development for a climate action plan for the state; ILT will continue to discuss

involvement in development of a climate action plan for the state; and begin coordinating with other partners (universities, federal, state, and local government agencies).

The presentations from the workshop can be viewed at [www.climatechange.nc.gov](http://www.climatechange.nc.gov).

Dr. Boyles believes that we have a mechanism for local communities to start adapting those methods now that the Coastal Resources Commission's report is out. He states that the report that Mr. Knight highlighted was a national report and is not designed to be used at the local level where a lot of the planning takes place. He encourages DENR or the ILT to start looking at how to develop a similar tool for the state and municipal levels.

Representative Harrison reminds us that the Commission expires on October 1<sup>st</sup> this year and all work needs to be done before Session begins in May.

### **AGENDA Item #3**

Tim Dodge talked about the draft final report (**Appendix J**) to the General Assembly and the Environmental Review Commission. He states that the report in its current form is still very much a draft. Based on conversations the staff had with the co-chairs, they tried to identify some common ground in which all the members of the Commission could agree. They also looked at the CAPAG report produced by DENR and a number of other reports produced by Climate Action Commissions and climate action programs in other states around the country looking for guidance on how they approached some of these difficult issues. He states that there are no other legislative Commissions with the same charge and membership as this Commission so we are unique in what we do.

Attempts are being made to acknowledge all of the efforts of everyone and provide a document that represents those efforts in a positive way. And also recognize many of the activities that are already under way in this state related to climate change.

Mr. Dodge stated that the recommendations of this Commission will be submitted to the 2011 General Assembly in January. The Introduction section highlights the tone and purpose of the report and recognizes the contributions of many of the members to this report.

The co-chairs proposed that Commission Action on the Findings section be voted on as a whole set. We will have discussion on what goes into that whole set prior to being considered.

The co-chairs proposed that the Legislative Proposals be voted on individually and not as a set. Mr. Dodge stated that any statements that he makes or that is in the report is not meant to be a forecast of how the discussions are to go, just to provide guidance on those discussions.

The Commission Proceedings section is still in a very rough draft form and basically consists of a number of agenda items under each heading and will be expanded considerably in the next version of the report.

The Findings section is a place holder for the findings of the Commission while the proceedings section is being fleshed out and developing some general findings related to those presentations. The three findings currently listed are based on the resolution that this Commission adopted in February 2008. Assistance is needed from each of you so if you have findings that you would like to submit for inclusion that is supported by specific activities or presentations that this Commission has received, please forward to Commission staff and chairs.

The Previously Approved Recommendations are the 17 items that the Commission originally approved for inclusion in this interim report in 2007. The next section summarizes the recommendations that all of the Commission members submitted to the chairs for consideration. Most have been characterized at this point as recommendations for future consideration which means we are not currently preparing legislative drafts for these items. The exceptions are listed on pages 47-48 which contains the first list of some of the legislative proposals that we will be working on. The language is just a place holder identifying what will be included in those legislative proposals. Susan Iddings from the Commission staff is currently developing draft language for these six and we may be adding or taking some of these off depending on the feedback from all of you.

Several of the legislative proposals directs other state agencies or state bodies to conduct further study or analysis on some of these issues or develop a plan to respond to some of the items already identified. Some of the technical expertise may be missing and may be appropriate for those to be handed over to a state agency and bring those findings or recommendations back to the legislative body for additional discussion and consideration.

Appendix A provides the charge and Appendix B includes the current Commission membership, as well as recognizes all of the former members and staff to the Commission. Appendix C contains a chronological list of all the agenda items that this Commission has heard. Appendix D summarizes the action of CAPAG and their recommendations.

All members are asked to review the report fully and provide comments to the staff. If you feel that any items you feel strongly about have been left out of report or should not be in the report, please submit that via email to staff and co-chairs. Also, please provide the staff and co-chairs with information on any additional activities going on in the state related to climate change, including further implementation of CAPAG recommendations.

If you have items for the Findings section to be emphasized or highlighted, please submit those as well. If there are items that you feel that have been left out of this report or

items that you feel should be heard before the Commission completes its work, please let us know.

The next meeting is schedule for April 7<sup>th</sup> so please try to get us your comments within the next week so that we can get the report back to you for final review before our next meeting. We will try to get the final report back to you by April 2<sup>nd</sup> which will give you five days to review before the next meeting.

The meeting adjourned at 12:00 p.m.

Respectfully submitted,

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Representative Pricey Harrison, Presiding  
Co-Chair

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Mr. John L. W. Garrou, Co-Chair

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Thelma T. Utley, Commission Clerk

## APPENDICES

Appendix A. Sergeants-At-Arm Sheet

Appendix B. Attendance Sheet

Appendix C. Visitor Registration Sheet

Appendix D. 2009-2010 Membership

Appendix E. Report to the Environmental Review Commission

Appendix F. Agenda

Appendix G. Division of Coastal Management – Tancred Miller

Appendix H. North Carolina Sea-Level Rise Assessment Report

Appendix I. Draft Minutes, January 13, 2010

Appendix J. Final Report to the General Assembly and the Environmental Review Commission, May 2010